
Iowa Legislative Services Agency Fiscal Services

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Update on the Iowa Communications Network (ICN)

ISSUE

This *Issue Review* provides an update on the Iowa Communications Network (ICN) budget, debt service, lease maintenance, and Part III tail circuit lease expirations.

AFFECTED AGENCIES

Iowa Communications Network
Iowa Telecommunications and Technology Commission

CODE AUTHORITY

Chapter 8D, Code of Iowa

BACKGROUND

The ICN was created by the 1989 General Assembly as a Statewide, State-administered, fiber optics network. The ICN enables authorized users to communicate via high quality, full-motion, two-way interactive video; data transport; and long distance voice communications. Fiber optic technology converts voice, video, and data signals into digital light impulses, which are transmitted over 6,600 miles of owned and leased hair-thin glass fibers and has a virtual presence in over 760 classrooms and other sites throughout the State.

The ICN was built in three phases, beginning in 1991 with the completion of Phase III scheduled for September 2003. Part I and II consisted of the installation of a State-owned fiber optic endpoint in each county, the three State universities, Iowa Public Television (IPTV) and each IPTV remote transmitter site, and the Capitol Complex. Part III added video sites using leased circuits from private telecommunications providers such as K-12 schools, hospitals, State agencies, and private and community colleges.

Appendix A lists several past studies and reports mandated by the General Assembly regarding the ICN. These reports are available from the Legislative Services Agency, Fiscal Services, upon request.

CURRENT SITUATION**General Fund Appropriation for Video Subsidization**

The ICN was designated a common carrier in December 2000, which qualified the ICN as a Universal Service Fund (USF) voice and video service provider for authorized users in FY 2002. A common carrier is a company that furnishes services to the public without discrimination. Since the Iowa Technology and Telecommunications Commission is an independent entity from another State agency, State agencies are served indiscriminately and the ICN qualifies as a common carrier. As a common carrier, the ICN applies a discount credit to a user's monthly billing, then bills the Universal Service Administrative Company (USAC) for the balance of the credit. Reimbursements take approximately 120 days following receipt of the bill. The ICN carries the debt on this discount from the billing date until payment is received. The following is a list of the video subsidization appropriations from the General Fund from Actual FY 1999 through Estimated FY 2005:

- Actual FY 1999 \$3.8 million
- Actual FY 2000 \$3.4 million
- Actual FY 2001 \$3.2 million
- Actual FY 2002 \$2.2 million
- Actual FY 2003 \$1.0 million
- Estimated FY 2004 \$500,000
- Estimated FY 2005 \$0

Asynchronous Transfer Mode (ATM) Network Upgrade Project

The ICN was appropriated \$3.5 million in FY 2002 and \$5.0 million in FY 2003 from the Restricted Capital Fund to complete the installation of the last two rings for the Asynchronous Transfer Mode Network Upgrade Project. The purpose of the upgrade was to replace the outdated star-on-star typology equipment with overlapping backbone transport rings that would provide redundancy in the event a portion of the Network failed, so service would not be interrupted. As of July 2003, three of the five backbone transport rings are complete, the fourth ring is 99.0% complete, and the fifth ring is due to be complete by the end of September. The estimated cost for the five-year project was \$23.0 million, and no additional appropriations are needed.

Debt Service

In FY 1992 and FY 1993, the State issued bonds totaling \$114.5 million to finance the construction of Parts I and II of the ICN. Debt service payments are made twice a year in July and January. The General Assembly annually appropriates funds directly to the Treasurer of State for the repayment of the debt service. Prior to FY 2002, the ICN debt service was appropriated primarily from the General Fund, although other funding sources were occasionally used. The State refinanced the debt in FY 2002. From FY 2002 through FY 2006 (the year the debt is retired), funding for the annual debt service payment will be appropriated from the Restricted Capital Fund of the Tobacco Settlement Trust Fund.

According to the Tobacco Settlement Authority, the Treasurer's Office will require an appropriation of \$13.0 million in FY 2005 and \$1.7 million in FY 2006 to retire the balance of the ICN debt for Parts I and II.

Part III Maintenance and Lease Costs

The installation costs for Part III totaled approximately \$81.1 million, which was funded from the Rebuild Iowa Infrastructure Fund (RIIF). The on-going lease cost of \$2.7 million is also funded from the RIIF, with the exception of FY 2002 when the money was funded from a portion of the Pooled Technology Account.

The fiber optic cables for Part III sites are not owned by the ICN, but are on seven-year leases from the vendors that installed the fiber. The annual recurring maintenance and fiber lease costs for the Part III sites is \$2.7 million. The first Part III sites were installed in FY 1996 and the leases began to expire in 2003.

After the first group of Part III leases expired, a Request For Proposal (RFP) was released and leases were negotiated at a higher price than the previous leases. Additional leases will expire at the end of FY 2004. An RFP was released for these connections in July 2003. At the end of FY 2003, there were 63 leases that had expired but were extended or contracted with either a current or new telecommunications provider. The following is a list of the number of leases expiring and the year:

- 112 leases expiring in FY 2004
- 100 leases expiring in FY 2005
- 78 leases expiring in FY 2006
- 25 leases expiring in FY 2007
- 13 leases expiring in FY 2008
- 8 leases expiring in FY 2009

ALTERNATIVES

The General Assembly has considered the following in the past:

- Continue current operations as a State-maintained entity.
- Sell the entire ICN.
- Sell the excess capacity to the public, while the State retains control over the State portion.
- Convert the ICN to a public utility.
- State ownership/private management where network operations are outsourced to a private company.

On January 11, 1999, Ultrapro International, Inc., released a report on the Evaluation of Options for the ICN. The primary objective of the study was to review and evaluate the ownership and management of the ICN. The Report included an overview of the likely technological advances in the telecommunications industry and the potential impact on the ICN. The Report noted that without new competitors in the local telephone market, the sale of the network to an incumbent provider could potentially lessen the amount of competition that currently exists, and current authorized users who had seen affordable prices might see price increases. The report evaluated each option in relation to technology, market, and regulatory principles. The report stated that a

total network sale or lease could face legal, financial valuation, technical, and industry lobbying obstacles. The Executive Summary from the Ultrapro study is provided in **Appendix B**.

BUDGET IMPACT

The ICN receives approximately \$32.0 million in operating receipts, which are paid by authorized users. Receipts for services provide approximately 66.0% of the ICN revenue, while General Fund and Other Fund appropriations for debt service, video subsidization, and Part III lease and maintenance provide the remaining 34.0%.

During the 2000 Legislative Session, SF 2433 (Iowa Telecommunications and Technology Act) required the ICN to develop a long-term plan for establishing rates that would eliminate the need for a General Fund appropriation to subsidize Network costs for authorized users by June 30, 2007. This will be completed by FY 2005.

In FY 2001, State agencies reported saving \$8.8 million in travel and other expenses by holding meetings over the ICN. In FY 2002, the reported savings were \$6.3 million; however, not all agencies reported.

The following table reflects General Fund and Other Fund actual and projected appropriations for the ICN from FY 2003 through FY 2007, as well as direct receipts and operating expenditures.

**Iowa Communications Network Balance Sheet
FY 2003 - FY 2007**

	<u>Actual FY 2003</u>	<u>Estimated FY 2004</u>	<u>Estimated FY 2005</u>	<u>Estimated FY 2006</u>	<u>Estimated FY 2007</u>
Revenues					
State Appropriations					
RCF - Debt Service *	\$ 13,044,784	\$ 13,039,378	\$ 13,039,778	\$ 1,704,719	\$ 0
RIIF - Leases and Maintenance	2,727,004	2,727,004	2,727,004	2,727,004	2,727,004
RCF - ATM Upgrade	5,000,000	0	0	0	0
GF - Education Subsidization	1,002,356	500,000	0	0	0
SUBTOTAL	<u>\$ 21,774,144</u>	<u>\$ 16,266,382</u>	<u>\$ 15,766,782</u>	<u>\$ 4,431,723</u>	<u>\$ 2,727,004</u>
Receipts					
Direct Receipts for Services	32,261,679	31,951,059	32,074,825	32,819,825	33,587,927
TOTAL	<u>\$ 54,035,823</u>	<u>\$ 48,217,441</u>	<u>\$ 47,841,607</u>	<u>\$ 37,251,548</u>	<u>\$ 36,314,931</u>
Expenditures					
RCF - Debt Service	\$ 13,044,784	\$ 13,039,378	\$ 13,039,778	\$ 1,704,719	\$ 0
RIIF - Leases and Maintenance	2,727,004	2,727,004	2,727,004	2,727,004	2,727,004
RCF - ATM Upgrade	5,000,000	0	0	0	0
Operating Expenses	33,264,035	32,451,059	32,074,825	32,819,825	33,587,927
TOTAL	<u>\$ 54,035,823</u>	<u>\$ 48,217,441</u>	<u>\$ 47,841,607</u>	<u>\$ 37,251,548</u>	<u>\$ 36,314,931</u>

* Reflects only the appropriated amount needed to fund the annual debt service on the ICN bonds. Revenue from the Debt Service Reserve Fund (interest earnings) is also used to pay a portion of the annual debt service. A breakout of the total debt service payments is available upon request.

In FY 2007, the Debt Service will be retired. Based on current projects, the only State appropriation to the ICN in FY 2007 will be the \$2.7 million for the leases and maintenance agreements, which may change due to the renegotiation of the Part III leases.

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Update on the Iowa Communications Network
<http://staffweb.legis.state.ia.us/lfb/IREVIEW/ireview>
LFB: IRJDD001.Doc/08/26/03/11:50 am

APPENDIX A

The following includes reports and studies mandated by the General Assembly regarding the ICN:

- Five Year Financial Plan is completed annually per Section 8D.3(3)(f), Code of Iowa.
- Maintenance Contracts and other contracts are completed annually per Section 8D.3(3)(g), Code of Iowa.
- The Voice over Internet Protocol Technology (VoIP) Report directed by SF 2433, State Government Technology and Operations Act dated January 15, 2001.
- The Plan for Reducing Subsidization for ICN Video Rate by 2007 Report to the Legislative Oversight Committee on January 5, 2001.
- Evaluation of the Iowa Communications Network Report, Ultrapro Study dated January 11, 1999.
- The Dial-up Internet Access in Iowa Report prepared by the Iowa Utilities Board dated December 31, 1997.
- The Iowa Communications Network Authorized User and Use Task Force Report dated November 16, 1996.
- The 461 Task Force Report directed by HF 461, ICN Studies Act, in 1995.
- The Iowa Utilities Board Study of the Impacts of the Iowa Communications Network upon the Iowa Telecommunications Industry directed by SF 2089, Iowa Communications Network Governing Act, in 1995. This Study was directed by the General Assembly in Chapter 118.4(26) of the 1994 Iowa Acts.

I. Executive Summary

The primary objective of this project was to review and evaluate various options for the ownership and management of the Iowa Communications Network (ICN) as previously defined in the House File (HF) 461 Report. The overall goal was to provide a current evaluation of each option in a manner that would permit ready comparison of options by the Legislative Oversight Committee. Ultrapro International, Inc. (Ultrapro) was requested to provide its evaluation in straightforward, easily understandable terms and to avoid conclusions as to the best alternative. In response to that request, this report summarizes Ultrapro's external environment analyses by presenting Technology, Market and Regulatory Principles that the Legislature could use in its deliberations and decisions regarding the ICN. After those Principles were developed, Ultrapro performed its evaluation of the options in relation to the Principles as well as operations costs, capital expenses, and security impacts.

As part of its analysis Ultrapro reviewed the HF 461 Task Force Report and more than 100 other position papers, comments and articles on the subject of ICN. The written material covers ICN from the beginning, underscoring the concern various parties have had about whether to build the network at all and, once built, how best to maintain and utilize it. In addition to reviewing the written material, Ultrapro conducted interviews with representatives of the state government (policy makers, staff, and users), and private industry, to gain a perspective on ICN that might contain insights more recent than those included in the 1995 report of the 461 Task Force.

This report includes an overview of likely technological advances in the telecommunications industry and their likely impact on the ICN. The technologies used in the development and deployment of ICN are communications and computing technologies affecting the entire US economy, and will likely be some of the most important determinants of economic success in Iowa or in the US. These technology advances are forcing major changes not only in the communications market, but also in operations of the users of communications services, including education, libraries and government.

As these new, powerful technologies continue to be deployed in the communications industry, prices have been plummeting in competitive telecom markets. Competition does not yet exist uniformly throughout the US, but the linkage is clear: competition brings new technology, lower prices and a larger array of services. That combination also brings a better economic base and growth prospects for the community in which the competitive telecommunications

market exists. The combination of competition, new technology, lower prices and new services also provides the potential for developing the human capital to drive the new economy.

For these reasons, government has an interest in furthering competition. One of the goals of the Telecommunications Act of 1996 was to foster competition in communications markets so that more rapid technology change could occur for the benefit of consumers and the economy. The Act impacts Iowa and the ICN, primarily as a result of two subjects dealt with in the new law: the potential for increased competition in the market for telecommunications services, and the expansion of the Universal Service Fund (USF). However, both of these items are proceeding more slowly than federal lawmakers and regulators envisioned, and have so far only added to the uncertainty of the analysis of costs, benefits and attractiveness of any disposition of the network. Without new competitors in the local telephone market, sale of the network to an incumbent provider could in fact lessen the amount of competition that currently exists. And, under current FCC rules the ICN does not qualify for Federal Universal Fund subsidies for schools and libraries, whereas the subsidies would be available if the network were taken over by a common carrier. The Iowa Telecommunications and Technology Commission (ITTC) has petitioned for reconsideration of this FCC rule interpretation.

The report provides an evaluation of each option in relation to Technology, Market and Regulatory Principles, as well as other factors. Of the options to be considered, those involving lease or sale of excess capacity are limited by the facilities themselves and by operations issues; those involving total network sale or lease are faced with legal, financial valuation, technical, and industry lobbying obstacles. Of the remaining three options beyond the current mode of operation, two involve state ownership of a common carrier network. The other option, State ownership/private management is an extension of the current mode of operation in which network operations are outsourced to a private company.